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## REVIEW

## A NEW FERN MANUAL

LELLINGER, DAVID B. 1985. A field manual of the fetns and fern-allies of the United States and Canada. 389 pp., 26 figs., 402 color illustrations. Smithsonian Press, Washington, D.C. ISBN 0-87474-603-5 (pbk) and ISBN 0-87474-602-7.

This handsome book is a welcome addition to the popular fern-literature of North America, and will be useful in other parts of the North Temperate Zone. It is particularly valuable as a book written for an amateur audience, in popular and understandable language. However, it also seems critically attentive to accuracy in a field noted for its complexity, wide differences of opinion, and for much superficial popular writing.

The stated purpose of the work is to aid in identifying all of the species of ferns and fern allies that are native to or naturalized in Canada and the United States, excluding Hawaii. In carrying out this purpose it is eminently successful. Descriptions of taxa at the three principal levels, family, genus, and species, are clear and accompanied by discussion and explanation where necessary. Keys are of the "bracket" type, to save space, and they work, so far as I have tried them. Line drawings are provided to illustrate some techincal terms in the excellent glossary. A map and diagrams clarify ideas that are unfamiliar to many. And 402 magnificent color photos mostly by A. Murray Evans are provided for visual recognition, as well as to display the beauty of ferns. The photos are small, to keep the cost of the book down, but beautifully reproduced, nine to a page, in three columns, the numbering, curiously, from right to left on the page.

The classification adopted, selected from a number of relatively recent ones available, is not the most conservative in number of families accepted, but neither is it the most extreme. Twenty families of ferns proper are admitted for the United States and Canada, about half of which are readily recognized. The others may require more experience than most amateurs possess. The family key is not easy to follow, but so far as I can see, it will, if carefully used, lead to the correct family. Some of the families are so technical that they are hard to recognize by aspect.

An outstanding feature of the book is its recognition and explanation of hybridity in ferns. The prevalence of hybridization in these plants has led to much confusion and description of questionable species. A careful study of the chapter on hybrid complexes will alert the user to this phenomenon.

The ample introduction should provide the beginner with an idea of the range and fascination of the study of these plants. The more advanced student will find many of his questions answered, too.

The only major suggestion for a second edition would be to include familiar synonyms. The almost total lack of synonyms in a work where much new nomenclature is used is frustrating. One cannot locate a plant that one knows by a former commonly used name except by guessing from its position in the book, unless one already knows the many recent changes in ferrical classification and nomenclature. In my own case, the only way I could locate what I grew up knowing as Cheilanthes californica was to look in the vicinity of the treatment of Cheilanthes, where I found Aspidotis californica.

All in all, one can recommend this book as the best available popular treatment of American ferns, and it is also useful to the more botanically trained non-pteridologists.

F.R. Fosberg